WEIGHT OF WATER AND STEAM AT VARIOUS TEMPERATURES

Temperature, Degrees C.	Steam Pressure		Weights of				Ratio of Weights, *W+S.*
	Kilograms per Square Centimeter	Pounds per Square Inch	Water, Pounds per Cubic Feet.	Water, Kilograms per Cubic Meter. Ounces Feet	Steam, Kilograms per Cubic Meter	Steam, Pounds per Cubic Feet	
0	0.0062	0.088	62.49	999.8	0.0048	0.0003	206,15
4			62.50	1000.0			
20	0.0238	0.338	62.38	998.2	0.0173	0.0010	57.701
40	0.0749	1.066	62.01	992.2	0.0511	0.0031	19.517
60	0.2028	2.885	61.45	983.2	0.1305	0.0081	7.534
80	0.4828	6.867	60.73	971.8	0.293	0.018	3.307
100	1.0330	14.690	59.89	958.3	0.598	0.037	1.602
120	2.0240	28.790	58.96	943.4	1.1220	0.070	841
140	3.6840	52.390	57.90	926.4	1.9680	0.123	471
160	6.3000	89.590	56.71	907.5	3.265	0.204	278
180	10.216	145.30	55.41	886.6	5.1500	0.322	173
200	15.840 0	225.20	53.92 5	862.8 0	7.840 0	0.489	110

coefficient and for the viscosity of the hot water the steam bubble will rise above any moving stream of water circulating through a tube before it can be carried any great distance horizontally. A simple experiment will permit the verification of this. A glass test-tube is nearly filled with water and a smaller tube is used to blow air so it will bubble up through the water. A cork with a vent on one side and a hole for the smaller tube permits the test-tube to be inclined at various degrees. The ratio between the weights of equal volumes of air and water is 1 to 774. (When the tube is inclined the vent should be at the upper side, otherwise the apparatus will " backfire.[73]) Upon blowing through the small tube it will be found that at the vertical position and at slight, inclinations from the vertical, the air will rise in bubbles. This action is utilized in the air lift used in raising water from deep driven wells. When the degree of inclination approaches the horizontal there will be a tendency for the stream of bubbles to